

REMARKS

Claims 1-103 are pending in the application. Claims 1-103 have been rejected. No amendments have been made.

Rejection of Claims under 35 U.S.C. § 102

Claims 1, 5, 9, 10, 22 and 65 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,699,361 (“Ding”). Applicants respectfully traverse this rejection.

Independent claim 1 is repeated below:

1. An inter-module interface definition comprising:
a command definition, wherein
said command definition comprises commands for interfacing with a
multi-channel, multi-media, communication queuing system.

Independent claims 5, 22, and 65 contain substantially the same limitation.

The Office Action states that Ding teaches a command definition comprising commands, referring to “command codes” and citing columns 9-16 of Ding. Applicants respectfully request clarification of this rejection, as Applicants are unsure what is meant by the term “command codes.” Pursuant to 37 CFR § 1.104(c)(2), Applicants request that the Examiner indicate which elements in Ding columns 9-16 the Examiner is relying on to teach “a command definition, wherein said command definition comprises commands for interfacing with a multi-channel, multi-media, communication queuing system.” Applicants note that, under 37 CFR § 1.104(c)(2), “The examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable.” Applicants respectfully request that the Examiner more clearly point out which portions of columns 9-16 of Ding are being relied upon in the rejection of claim 1.

While Applicants are unclear as to the specific elements used to reject claim 1, Applicants have attempted to respond to the rejection as thoroughly as possible. Applicants respectfully disagree that columns 9-16 teach commands for interfacing with a multi-channel, multi-media, communication queuing system. Columns 9-16 of Ding provide pseudo-code for

three processes to support multimedia communications via a network. These three processes include a formulation process that defines, allocates, and deallocates channels (see Ding, column 9, lines 6 -20); a real-time scheduler process that receives requests to allocate channels generated by applications and determines if there are sufficient resources to satisfy the requested channels (see Ding, column 10, lines 38-51); and a streamer process, which sends and receives data communicated to a host via a communications network (see Ding, column 12, lines 25-36). The streamer process also assembles data into packets and reassembles data from received packets.

Applicants respectfully submit that the pseudo-code shown in columns 9-16 does not *define commands for interfacing with* a communication channel, but rather shows one possible way to *implement the infrastructure supporting communication channels*. For example, the channel allocation code for real-time scheduler process 320 has the following statement:

If a request R1 is received from an application to allocate one or more channels where R1 includes one or more specified parameters input_par1, input_parJ for each requested channel, ... (see Ding, column 10, lines 55-58).

In contrast, a definition of a command for allocating a communication channel would indicate information such as the name of the command to be used to allocate a communication channel, the parameters for the command, possibly initial values for the parameters, and other information needed to invoke the command that *interfaces with* the communication channel. At best, the pseudo-code excerpted above points out that such a command may exist, but does not provide the command definition for the command.

Because Ding does not teach a command definition comprising commands for interfacing with a multi-channel, multi-media, communication queuing system, all elements of independent claims 1, 5, 22, and 65 are not taught. Consequently, independent claim 1, its dependent claims 2-4 and 87-103, independent claim 5, its dependent claims 6-10, independent claim 22, its dependent claims 23-44, independent claim 65 and its dependent claims 66-68 are allowable for at least the foregoing reason.

Rejection of Claims under 35 U.S.C. § 103

Claims 2-4, 6-8, 11-21, 23-40, 43-64 and 66-103 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ding in view of U.S. Patent 5,946,399 (“Kitaj”). Applicants respectfully traverse this rejection.

Applicants respectfully submit that a prima facie case of obviousness has not been made. In addition to the claim elements not taught or suggested by the cited references as described above, no suggestion or motivation to combine Ding and Kitaj has been shown, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. According to the Office Action with respect to claim 2, it would have been obvious to “apply the teachings Kitaj to the system of Ding because by creating driver objects and service objects, data of different kinds would be separately controlled via separate channels as disclosed by Kitaj.” (Office Action, page 4, paragraph 40, citing Kitaj, column 2, lines 28-37.)

Applicants respectfully point out that the inventions of Ding and Kitaj address completely different problems. The invention of Kitaj is concerned with separating encrypted data from non-encrypted data as the data flow through a common memory interface of a cryptographic card in communication with client applications. The need to separate data of different kinds coming into a common memory is not a problem that is pertinent to the present invention. It is unclear to Applicants how the problems of separating encrypted from non-encrypted data in a device driver for a cryptographic card apply to a command definition including commands for interfacing with a multi-channel, multi-media, communication queuing system.

Moreover, the device driver of Kitaj uses several simplex channels to control data flow. Each channel is managed separately using its own object, and each channel has unique access protection through the object handles. The advantages of using objects to manage simplex channels for data security purposes are not apparent in the context of multi-media, multi-channel communication queuing. Applicants respectfully submit that no motivation to combine Ding and Kitaj exists and, consequently, claims 2-4, 6-8, 11-21, 23-40, 43-64 and 66-103 are allowable for at least this reason.

Even if the inventions of Ding and Kitaj were to be combined, Applicants are unclear what the result would be. The device driver of Kitaj provides an interface to a single device and

divides packets coming into the device into separate simplex channels. Ding teaches allocating resources for allocating a communication channel upon request by an application. Both references teach allocation of resources to manage communication channels, but neither teaches command definitions for interfacing with a multi-channel, multi-media communication queuing system. The combination of the channel formulation mechanism of Ding with the device driver of Kitaj would not provide the command definition for interfacing with a multi-channel, multi-media, communication queuing system, as claimed in independent claim 1, and as substantially required by independent claims 5, 11, 22, 45, 65, and 69. As a result, claims 1-103 are allowable for at least this reason.

Claims 2-4, 6-8, 11-21, 23-40, 43-64, and 66-103 include independent claims 45 and 69. The Office Action rejects claims 45 and 69 for the same reasons for which claims 1, 2, 34, and 36 were rejected. (See Office Action dated 9/22/04, paragraph 4, pages 8-9). The allowability of claims 45 and 69 is discussed herein in terms of the rejections of claims 1 and 2.

Independent claim 45 is repeated below:

A method of inter-module communication between at least one channel driver and a communication server, wherein the channel driver is operable to interface with one or more communication devices, and further wherein two or more of the communication devices can use different media types, the method comprising:

defining a command definition, wherein

said command definition comprises commands for interfacing the at least one channel driver with the communication server.

Independent claim 69 has substantially the same limitations.

In terms of the rejections of claims 1 and 2, independent claim 1 has been shown to be allowable over Ding standing alone, as presented above. With regard to dependent claim 2, the Office Action states that “Ding further teaches commands to request media type lists and command event lists,” citing Ding, column 5, lines 6-30. Applicants respectfully disagree. Applicants have searched the cited portions and other portions of the Ding reference and can find no reference to a media type list or to a command event list or any command that obtains media types or command events. Furthermore, Ding has been shown to lack a teaching of the command definition that defines the commands to request media type lists and command event

lists. All elements of dependent claim 2 are not taught by Ding, and claim 2 is allowable for at least this reason.

Further with regard to dependent claim 2, the Office Action states that Ding does not explicitly teach driver objects and service objects. Applicants agree. In the rejection of claim 2, the Office Action cites Kitaj as providing the requisite teaching of commands to create driver objects, request service objects, and release driver objects. Applicants respectfully disagree with this characterization. While Kitaj refers to driver objects, Applicants have searched Kitaj and do not find a command definition to create or release driver objects. Furthermore, the Office Action appears to indicate that a request to permission to perform an action to a separate object (the input event scheduler) is equivalent to a request for a service object. (See Office Action, page 4, first paragraph). Applicants respectfully disagree, and can find no reference to a service object in the Kitaj reference.

Applicants respectfully submit that independent claims 45 and 69 are allowable for at least the foregoing reasons. Consequently, independent claim 45, its dependent claims 46-64, independent claim 69, and its dependent claims 70-86 are allowable for at least the foregoing reasons.

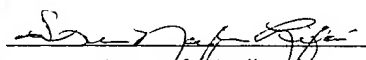
Claims 41 and 42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ding in view of U.S. Patent 5,983,019 (“Davidson”). Each of claims 41 and 42 depends from independent claim 22. As explained above, independent claim 22 is allowable over the Ding reference standing alone. Consequently, dependent claims 41 and 42 are also allowable for at least this reason.

In summary, each of claims 1-103 is allowable for at least the foregoing reasons.

CONCLUSION

In view of the remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned at 512-439-5086.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Amendment, COMMISSIONER FOR PATENTS, P. O. Box 1450, Alexandria, VA 22313-1450, on December 22, 2004.


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12/22/04
Date of Signature

Respectfully submitted,



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